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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,762	11/21/2003	Xin Ning	17,891	1449

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EXAMINER

DESAI, ANISH P

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/718,762	<b>Applicant(s)</b> NING, XIN	
	<b>Examiner</b> Anish Desai	<b>Art Unit</b> 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 17-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/14/05, 2/10/04, 10/19/04</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-16 and 21, drawn to a biodegradable and breathable film, classified in class 428, subclass 304.4.
- II. Claims 17-20, drawn to a process for manufacturing a biodegradable and breathable film, classified in class 264, subclass 41.

The inventions are distinct, each from the other because of the following reasons:

1. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product (i.e. biodegradable and breathable film) can be made using a different process such as an extrusion process to form the film.
2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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3. During a telephone conversation with Mr. Robert Ambrose on 08/01/2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-16 and 21. Affirmation of this election must be made by the applicant in replying to this Office action. Claims 17-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 depends on the claim 17. The claim 17 is withdrawn from consideration because it is drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,3, 5-8,12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu et al. (WO Patent 02/42365).

6. Regarding claims 1 and 13, Wu et al. teach a biodegradable film permeable to moisture vapor and air but impermeable to liquid with moisture vapor transmission rates (MVTRs) of about 1000 to 4,500 grams per square meter per day (see Abstract). The

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examiner is equating the MVTRs of Wu et al. as the claimed WVTR in the claims 1 and 13. The melt blending composition consists of about 40% to about 75% by weight of a biodegradable polymer and about 25% to about 60% by weight of inorganic filler such as calcium carbonate (Page 8, lines 9-13). The preferred biodegradable polymer is polyester such as aliphatic-aromatic copoyesters (Page 8, lines 20-23). Additionally, Wu et al. teach that it is known to provide biodegradable films with different polymer phases in the film so that when the film is stretched at ambient or room temperature, microvoids are produced to provide breathability and moisture vapor transmission (Page 8, lines 1-5).

7. Regarding claim 3, Wu et al. teach that the composite or laminate can be incrementally stretched in the cross direction and in the machine direction (Page 12, lines 2-6). The examiner is equating the cross direction and the machine direction stretching of the composite of Wu et al. as biaxial stretching.

8. Regarding claims 5 and 6, please see previously disclosed invention of Wu et al.

9. Regarding claims 7 and 8, Wu et al. teach that the particle size of the inorganic filler is about 1 to about 10 microns (See claim 21).

10. Regarding claim 12, Wu et al. teach that the melt blending composition consists of about 40% to about 75% by weight of a biodegradable polymer and about 25% to about 60% by weight of inorganic filler such as calcium carbonate (Page 8, lines 9-13). The preferred melt blending composition consists of about 60% to about 75% of polyester such as aliphatic-copolyesters (Page 8, lines 20-23).

11. Regarding claim 13, please see the previously disclosed invention of Wu et al.

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12. Regarding claims 14-16, Wu et al. teach that the film may be laminated with a nonwoven web (Page 7, lines 21-22) and that the microporous film or laminate is used in baby diapers, baby training pants and garments (Page 12, lines 6-11).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (WO 02/42365).

14. Wu et al. teach a biodegradable and breathable film (Page 7, lines 10-11). Wu et al. disclose the claimed invention except for the machine direction stretch ratio as claimed in the claim 2 and the cross machine direction stretch ratio as claimed in the claim 4. Note that the stretch ratio is considered as a result effective variable. As the stretch ratio increases the MVTR (Moisture Vapor Transmission Rate) also increases. According to Wu et al., an incremental stretching force is applied to the film or the laminate to provide a film having a high MVTR and air permeability (Page 11, lines 2-5). Additionally, Wu et al. teach that film can be stretched in the cross direction and the machine direction (Page 12, lines 2-6). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to stretch the film to obtain the machine direction stretch ratio as claimed in the claim 2 and the cross machine

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direction stretch ration as claimed in the claim 4, because the discovering an optimum value of a result effective variable involves only routine skill in the art.

15. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (WO 02/42365) in view of Nakagawa et al. (US Patent 5,308,663).

16. The invention of Wu et al. is previously disclosed. Wu et al. are silent with respect to teaching compatibilizer.

17. Nakagawa et al. teach a biodegradable nonwoven fabric suitable to throwaway use (see Abstract) and throwaway fabrics such as diapers (Column 1, lines 15-17). The object of the invention of Nakagawa et al. is to provide a biodegradable nonwoven fabric having sufficient strength, water resistance and moldability (Column 1, lines 54-56). Nakagawa et al. teach that it is possible to impregnate the biodegradable fabric with fatty acid to give water repellency to the fabric and control the decomposing period (Column 2, lines 65-68). The examiner is equating fatty acid of Nakagawa et al. as the claimed compatibilizer.

18. Regarding claims 9 and 10, it would have been obvious for a skilled artisan to use the fatty acid of Nakagawa et al. in the biodegradable film of Wu et al. One would be motivated to do this, in order to form a biodegradable film that is water repellent.

19. Regarding claim 11, Wu et al. in view of Nakagawa et al. teach claimed invention except the compatibilizer comprises from about 0.02 weight percent to about 2 weight percent of the film. Note that the amount of compatibilizer is considered as a result effective variable. As the amount of compatibilizer increases, the water repellency of the film also increases. It would have been obvious to one having ordinary skill in the

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art at the time the invention was made to select the amount of compatibilizer as claimed in the claim 11, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 16 of copending Application No. 10/718,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 teaches a composition for biodegradable, breathable film comprising biodegradable polyester, biodegradable copolyester, and at least one filler and claim 16 teaches that the film can be stretched in at least a monoaxial direction.



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21. Claims 3, 5, 6, 9, 12, 14, 15, and 16 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17, 3, 4, 6, 8, 18, 19, and 20 of copending Application No. 10/718,973. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 17 teaches that film is biaxially stretched, claim 3 teaches copolyester of aliphatic/aromatic acid, claim 4 teaches calcium carbonate as filler, claim 6 teaches compatibilizer, claim 8 teaches about 40 weight percent to about 55 weight percent polyester and copolyester, and from about 60 weight percent to about 45 weight percent filler, claim 18 teaches the film comprising additional layer bonded thereto, claim 19 teaches a disposable article or manufacture, and claim 20 teaches the disposable article which is selected from the group consisting of medical products, protective garments and personal care absorbent articles.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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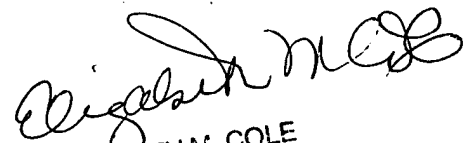
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anish Desai whose telephone number is 571-272-6467. The examiner can normally be reached on Monday-Friday, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

APD

  
ELIZABETH M. COLE  
PRIMARY EXAMINER